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ABSTRACT

This study examines the course shopping behaviors of approximately 5,000 community college students enrolled across the nine campuses of the Los Angeles Community College District in spring 2001. The sample students are representative of the district. For the purpose of this analysis, the authors define course shopping as: (1) cyclic shopping, the pattern of dropping a course and adding another in its place; and (2) bulk shopping, the process of adding courses up front with the expectation of dropping some later. The research questions driving the analyses were: (1) What kinds of course shopping behaviors do students perform? (2) How prevalent is the activity? (3) Are there discernible demographic patterns of students who course shop? (4) Does course shopping differ by discipline or type of course? (5) Do students who course shop have significantly different GPAs or course completion ratios than student who do not practice this behavior? The findings indicate that the no shopping comparison group had a GPA of 2.56, while the bulk shoppers had a GPA of 2.46, true cyclic shoppers had a GPA of 2.46, and mixed bag shoppers had a GPA of 2.13. The authors argue that, due to budget cuts in the community college, it may be suitable to take actions to curtail unnecessary course shopping. (Contains 5 tables and 28 references.) (NB)

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Course-Shopping in the Urban Community Colleges: An Analysis of Student Drop and Add Activities

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Course-Shopping in the Urban Community Colleges: An Analysis of Student Drop and Add Activities

Introduction

The heterogeneous student body of community colleges is not comparable to that of the typical four-year university. Indeed, many community college students enter their institutions with multiple risk factors that may deter them from their goals (Borglum & Kubala, 2000; Nora, 2001; Rendon & Garza, 1996). While it is easy to cite low transfer rates, low associate degree acquisition rates, and high stopout rates that have placed the country's network of community colleges in the lowest tiers of student success, it is difficult to identify the specific student behaviors that additionally jeopardize success. And once behaviors are identified it is also difficult to implement the appropriate policies to bolster the positive and dissuade the negative.

The first decade of the 21st century has witnessed nationwide patterns of deep budget cuts resulting in the elimination of community college programs, the slashing of course offerings, and an ushering in of a new reality that can only be described as "no-frills" (Cohen, 1989; Temple, 1986). Given the unlikelihood of a return to more generous budgetary allotments, inquiry into student behaviors that create unnecessary administrative tasks, fallaciously occupy classroom seat allocation, and jeopardize the success of students is especially warranted and timely. This analysis takes a look at enrollment behaviors that are widely practiced by college students, generally considered benign, and rarely examined – course shopping. Behaviors included under the term "course shopping" can be varied. For the purposes of this analyses, we have defined and

focused on two specific types of shopping herein labeled cyclic shopping (the pattern of dropping a course and adding another in its place) and bulk shopping (adding courses up front with the expectation of dropping some later).

This paper examines the course shopping behaviors of approximately 5,000 community college students enrolled across 9 campuses of a large urban district. The research questions driving the analyses were:

1. What kinds of "course shopping behaviors" do students perform?
2. How prevalent is this activity?
3. Are there discernible demographic patterns of students who course shop? In other words, do student who "course shop" differ by gender, ethnicity, or age?
4. Does "course shopping" differ by discipline or type of course?
5. Do students who "course shop" have significantly different GPA's or course completion ratios than students who do not practice this behavior?

Research on Course Dropping and Adding

Currently, the literature is extremely sparse to as to why students "shop" or enroll and withdraw from multiple courses each semester. A study of the persistence behavior of students who drop courses provides evidence that this practice has been in use for some time (Rownd, Bolton, & Marr, 1981). The study found the factors likely to predict students who drop courses are: GPA, course difficulty, and whether or not the course is within the students' major field of study. Fleming and colleagues (1985) recorded the "course-dropping" behaviors of students at Clemson University for three semesters. They isolated two distinctive sets of students that they coined: the chronic-droppers and the super-droppers. Chronic droppers were defined as those students who dropped courses

during two of the three semesters, while the super-droppers, a subset of the chronic-droppers, dropped one or more courses during all three semesters. The two sets of "droppers" were responsible for 71.25% of the total hours dropped at the study university. The high level of activity led to the introduction of a "withdraw" notation on transcripts to indicate that the student withdrew after the add and drop date.

Another single-institution study of 424 urban college students' add and drop behaviors came to a different conclusion. Moran and colleagues (1995) suggested that students utilized the practice legitimately and recommended that colleges provide unrestricted privileges to assist students to find the appropriate courses and sections to aid their success. Moran (1995) concluded that students find college regulations as the most common reasons that students drop and add courses. Nearly half of the student indicated that they need special permission to registrar forcing them to register after the course begins. Other reasons included registering for an undesirable course to maintain fill-time status, work schedule conflicts, and registering for more courses and dropping those not desirable.

Another single institution study verified the regularity of "course-dropping" and concluded that these actions were not uniform for all students but varied by race and major (Morris, 1986). The most common reasons that students drop and add courses were due to conflict in schedules, dissatisfaction with teaching, and the need for more study time. Further, it was found that adding and dropping behaviors occurred with more frequency in the lower level courses (Morris, 1986). When analyzed by ethnicity, results indicated that a higher number of Black students participated in drop and add behaviors than did White students.

A community college report took a different slant to understanding student "course dropping." At a single campus, the Office of Institutional Research analyzed 2,331 checklists filled out by students after dropping a course. Students were provided with a checklist of likely reasons why they were dropping a specific course. Findings indicated that the most frequent reasons cited for dropping were financial (37%), followed closely by factors related to the course itself such as dissatisfaction with course content, level of difficulty, and inability to keep up with class assignments (34%). Students also cited illness, inappropriateness of the course, and feelings of being under-prepared (Thomas-Spiegel, 1997).

Course dropping and adding has also been shown to be related to efficacy expectations. Bandura (1977) found that a student expectation for success and the amount of experience with a particular subject determined subsequent enrollment patterns. If a student had multiple positive experiences in a subject or course, he/she was more likely to persist. Further support for this argument was found in the work of Rownd, Bolton, and Marr (1981) who identified GPA and course difficulty as strong predictors in student course taking behaviors. Students with high efficacy, defined by high GPA's, were found to be more likely to persist in a course.

Course Shopping as a Factor of Retention

For obvious reasons, the study of student retention is a major outcome of interest in postsecondary educational research. While dropping a course and dropping out of school are not identical actions, one must acknowledge the overlap. Since dropping out of school can be likened to dropping ALL of one's courses, an understanding of course completion can be aided by the retention literature.

Tinto and Astin are predominantly responsible for the two primary theoretical frameworks for student retention and persistence based on the concepts of academic and social integration. Tinto (1987; 1993; 1998) asserts that two factors relate to student persistence in college: 1) the commitment to the institution and to one's educational goals, and 2) the student's interaction with the college. Astin (1997) found that involvement or social and academic integration are primary factors in promoting retention. Simply put, students who have invested themselves more fully into their institutions are more likely to matriculate to a degree. The literature also supports the importance of time in the retention equation. The first six months, according to Tinto (1993; 1998), is the most critical time in determining student persistence.

Also important to retention is the level of support supplied by the community and family (Tinto, 1993). Nora (2001) summarized the work on retention in terms of family and community support and concluded with five major themes: 1) encouragement and support aid the transition from high school to college, 2) encouragement from different sources provide necessary support to assist students survive in a new environment, 3) the degree of the support influence the academic and social experiences of the student, 4) commitment to degree attainment is directly impacted by support, and 5) retention is impacted by the student's perceived support. On the other hand, factors that "pull" students away from their studies such as hours of work, financial problems, family and personal difficulties can deter students from completing their course of study (Nora, 1987). When considering retention, one must include financial variables. Hippensteel, St. John, and Starkey (1996) identified a negative correlation between within-year persistence and tuition, indicating the student enrollment and persistence could be

effected by a rapid or sudden increase in tuition costs. Cofer and Somers (2000) found similar results with low levels of debt and tuition increase having a negative correlation with persistence but a significant and positive correlation with high levels of debt. Thus, they concluded that loans assisted with student persistence. Heverly (1999) studied student encounters with the college process to determine if institutional characteristics were a factor in student retention. Institutional characteristics included financial aid, policies for dropping and adding courses, advising, and instructors. Results indicated that students who returned reported greater levels of satisfaction with all the institutional processes.

Retention in Community Colleges. There is much less research on the factors promoting retention in community colleges. While many may feel that the factors may be similar, most researchers who concentrate on community colleges have found the students who attend "two year institutions" to be quite unique (Hagedorn, in press). Community college student life stretches the definition of academic and social integration and begs for new and more appropriate definitions (Hagedorn, forthcoming). Testing Tinto's model of student retention on a community college population, Borglum and Kubala (2000) found that students who are academically integrated also feel socially integrated despite the lack of traditional social involvement by the students. Survey results also found no correlation between academic or social integration and withdrawal rates. The lack of correlation may be due to the surveying of only second-semester students who persisted in college through the "weeding out' first semester. The second-semester students also indicated feeling integrated both academically and socially and

reported feeling generally satisfied. Finally, students scoring higher on standardized computer placement tests were found to be less likely to withdraw from their courses.

Using a sample of 208 community college students who formally withdrew from courses over a six semester time frame, Grimes and Antworth (1996) concluded that external pressures, jobs, family, health emotional or academic factors, contributed to college withdrawal for the overall population. Delineating the sample by gender, age, and ethnicity provided differentiating results. Women reported withdrawing for external and personal reasons. Factors included marital changes and health problems. Men reported withdrawals associated with non-challenging course work at a greater rate than women. Traditional and nontraditionally aged students also reported differences. Traditional students suggested that withdrawal is a product of geographically relocating, college transfer, or work while nontraditional women withdrew due to family reasons. Finally, Grimes and Antworth found that ethnicity was significantly correlated with integration. Non-demographic factors, such as GPA and previous withdrawals, concluded the variables correlated with enrollment patterns.

Methodology

Sample. This study used the sample of community college students from the Transfer and Retention of Urban Community College Students Project (TRUCCS). TRUCCS, funded by the Field Initiated Studies (OERI Grant R305TOOO154), includes questionnaire and transcript data from 5,000 students across the nine Los Angeles Community College (LACCD) campuses. Questionnaire data was collection in the Spring of 2001 from a cross section of community college students, representative of the district (Hagedorn, 2001). Participating students provided releases of their transcripts

and other district records for the purposes of research. Thus, although the initial data collection occurred in Spring 2001, the transcript data went back as far as 1974. This analysis of student behaviors was based on the transcript data covering the period of Fall 2000 through Winter intersession 2001[1].

Definitions. The first step in these analyses was the operationalization of the constructs of interest. Our first dependent variable, *GPA*, was the student's cumulative grade point average during the semesters studied. The second dependent variable, *success ratio*, was calculated as the quotient of the number of classes successfully passed (grade of A, B, or C, or in cases of classes graded with a pass/no pass scale, P) divided by the number of classes attempted. An enrollment was counted as an attempt, if the student remained on the class rosters through the 4th week of a typical semester. A class was not passed (non-success) if the student earned a grade of "F" or dropped the course between the 5th to 12th week of the semester thereby earning a grade of W.

Why Use Success Ratios? Success ratios are an outcome defined by the TRUCCS project. TRUCCS promotes that the course is the unit of measure of success in that it is the building block for all other outcomes such as transfer, an Associate Degree, or a certificate. Success ratios are especially suited to community college students because it uses the student's expressed behavior, enrolling for a course, as the measure in which success is measured. While it can be argued that many students do not intend to transfer or earn a degree or certificate; it is likely that students who enroll for a course and remain in it through at least 4 weeks, had the intention of finishing the course. Although simple, the course completion ratio can indicate success with unprecedented

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1 Semesters included: Fall 2000, Spring 2001, Winter Intersession 2001, Summer 2001, Fall 2001, Winter Intersession 2002.

validity far beyond that of the usual dichotomous measure of retention used in other studies (Hagedorn et al, 2001). Further, the course completion ratio is ideal for the community college environment because it flexes to accommodate part-time enrollment that is prevalent among community college students.

"Shopping definitions". We defined two types of shopping behaviors:

- **Cyclic Shopping**-- A student activity of dropping a course and on the same day or after, adding another course in its place.

- **Bulk Shopping** – A student activity, defined on a semester to semester basis, consisting of a single, one-time enrollment in multiple courses followed by the bulk dropping of half or more (but not all) of the classes originally enrolled[2].

Both shopping activities involve the act of dropping courses. For the purposes of shopping activities, we defined a "drop" as any enrollment dropped between the start date of class and the 5th week of the course.

Finally, we defined additional subsamples of students as follows:

- **True Cyclic Shopper**-- A student who displayed cyclic shopping behaviors in 30% or more of their enrollments[3].

- **Mixed Bag Shopper** – A student who was defined as a bulk shopper in at least one semester and was also a true cyclic shopper. This is a small group of people who were very active in using both types of shopping patterns.

Procedures. This study included a three tier structure of analyses. First, we performed a general linear model univariate analysis (GLM), to test for group differences by GPA and success ratios between four groups of students as defined by shopping behavior. The four groups were, bulk shoppers, cyclic shoppers, mixed bag shoppers, and non-shoppers. The second tier of analyses consisted of chi-square tables to ascertain

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[2] Dropping all of one's courses is considered a "dropout" or "stopout" and not included in the shopping behaviors described in this manuscript.

[3] Calculated as quotient of the number of times a student "cyclic shopped" over the number of course enrollments times 2 (cyclic shopping occurs in pairs of adds and drops) True cyclic shoppers had a ratio of .30 or more.

differences in the distribution of the four types of shoppers by gender, age, and ethnicity. The third tier consisted of an in-depth analysis of cyclic shopping behaviors examined by the type of course dropped and the type of course subsequently added. These comparisons were made using both the enrollment and the student as the unit of analysis. The last tier of analyses consisted of an examination of bulk shopping by course type and enrollment.

Results

Tier 1 – GPA by shopping behavior. Table 1 provides the results of analysis of variance to test for differences in GPA and success ratio by the four shopping groups. The multivariate Wilks' Lambda was significant (Λ=.988; F=8.912, df=6, 9164). The tests of between-subjects effect for GPA (F=6.897; p df=3, 4583; p< .001) and success ratio (F=16.919; df=3, 4583; p< .001) were both significant. We chose the Dunnett T3 post hoc tests to test the shopping groups against the control "non shoppers" as it is the recommended procedure for this type of comparison, especially when variances in groups are not equal (Hochberg & Tamhane, 1987).

Insert Tables 1 and 2 about here

The second tier of the analyses involved chi-square tests for the equality of the distribution by gender, age, and ethnicity. Table 2, provides the proportions of students in the full sample and the four shopping types, broken down by various demographic descriptors. While the comparisons by gender were statistically significant (χ^2=15.325, df=3; p< .01), the comparisons by ethnicity (χ^2=14.125, df=9; p>.05) and age (χ^2=6.539; df=3, p>.05) were not.

Tables 3 and 4 provide the results of the third tier of the analyses. In table 3, we analyzed cyclic shopping through a classification system by the course dropped. We provide information on five categories of courses categorized according to the system used in the LACCD; English (all levels), Math (all levels), remedial, transfer level (transferable to the California State University System), and occupational. In some cases, a course was included in more than one category. For example, a remedial math course would be counted in both the remedial and the math categories. Table 3 provides the number of instances of cyclic shopping involving the dropping of specific types of courses as well as the type of course added in its place. Table 4 is similar to Table 3, except that it provides the information by student. In this table, counts indicate the number of students who dropped a course by type.

Insert Tables 3, 4, and 5 About Here

Table 5 provides information on bulk shopping. The table provides counts and proportions of bulk shopping students classified by course dropped. The table also provides the average number of attempts and drops by course type.

Conclusions and Policy Implications

The add and drop processes were implemented into colleges and universities for good reasons that when appropriately applied, assist students to achieve success. Lives change and some students need flexibility to drop a course that is no longer at a convenient time. Typically based only on short college catalogue entries, students, especially those enrolled in community colleges, are sometimes misinformed about course content and delivery. After a single or even a few class sessions, a student may

suddenly realize that the course is inappropriate due to the level of presentation or the content included and may need to alter an enrollment. One must also acknowledge that all instruction is not equal. Two instructors teaching the same course will do so differently. Often, student and instructor personalities are harmonious, but there are times when teaching and learning styles conflict and specific students would be better served by another instructor. Finally, after one or more course meetings, a student may see the need to drop a course and enroll for a more introductory or even remedial course in the same discipline. These common occurrences occur and are remedied by liberal drop and add processes.

This paper in no way seeks to eliminate student options that lead to their success. However, while we recognize the advantages of the add and drop processes, we also acknowledge that for some students, the practice may be overused and not entirely beneficial. We challenge the notion that all students are taking course enrollment as seriously as they should and raise the possibility that while choice is generally good, practices that promote students to sample courses in manners or volumes that limit the availability of seats to serious students who need to take courses in a timely way, may warrant reevaluation. In addition, excessive dropping and adding of courses unnecessarily takes administrative and staff resources that are already strained due to current budget restrictions.

At the time of this writing, the Governor of the state of California cut the community college budget by $161 million, representing an approximate 3.3% decrease during a time of enrollment increases (California Community Colleges, 2003). The State Chancellor, Thomas J. Nussbaum, is rightly concerned about the aftermath of these

reductions and the apparent pattern of lesser and lesser funding that appears to be the new emergent pattern. According to Chancellor Nussbaum, "Virtually every community college in the state is cutting classes, turning away students, and issuing layoffs notices to faculty and staff" (California Community Colleges, 2003). Within this new reality, it may be suitable to take actions to curtail unnecessary course shopping by assisting students to make wise choices the first time. This admonition is warranted by our findings that among the groups of students tested those who did not partake in shopping activities not only earned the highest GPAs, but also completed their courses at the highest proportions. While our analyses uncovered a slight relationship between gender and tendency to shop, we found no true discernible pattern by age, or ethnicity. Thus, while we cannot predict who will shop, we can see that successful students appear not to shop. Certainly, we must admit to a "chicken and egg" problem, forcing us to ask if non-shoppers are more successful or are the more successful students less likely to shop. While we accept the ambiguity of directionality, we continue to stress that the numbers of dropped courses signify the need for change within a financially strapped environment.

Our analyses of the courses that students added provide ample data for discussion. Each of the categories could generate significant and unique discussion. For example, in the area of English and Math, both subjects required for transfer and in most cases for the award of an occupational certificate, approximately two-thirds of the adds following a drop were in discipline areas other than English or Math. It may be surmised that if students were predominantly dropping courses for the reasons that the instructor, the method, or the level was inappropriate; they would have subsequently replaced the inappropriate course with another in the same area but with a different instructor or at a

different level. Instead, these students have replaced English and Math with other kinds of courses. Further, when looking at the number of students dropping English and Math, it is apparent that Mathematics is a key area for shopping behaviors.

The findings on remedial courses may be more positive. Here we see that for cyclic shoppers, approximately 60% of the dropped courses were replaced by a non-remedial course. Thus, it may be that these students found the course to be redundant or not necessary and opted for the more advanced non-remedial course. Further analyses is required to ascertain if these judgments were warranted.

Bulk shopping, appears to be a slightly less negative behavior than cyclic shopping when judged by GPA and course completion success ratios. It may be that bulk shopping behavior, that is dropping many but not all of one's courses, has different antecedents than cyclic shopping. The bulk drops may be a response to the unexpected demands of college. For some, the bulk dropping of courses may be likened to the jettison of cargo on a ship that is in danger of sinking. To continue the metaphor; while some students will continue to sink, others will be aided to successfully pass the courses that remain.

It is important to stress that although we found differences in GPA and successful course completion by different shopping patterns, we confined our tests to very stringent (heavy) definitions of these behaviors. It may be that heavy shopping behavior has the most negative impact and that different patterns would emerge if students use these behaviors more judiciously. Future research will examine this question.

Policy Implications. Course shopping can have negative repercussions for students and their campuses. While occasional shopping may have advantages, it is

clearly better for students to make initial wise choices in the enrollment process so that they do not need to drop and add subsequently. It is easy to recommend additional counseling and advising for students so that they have a better picture of college life, but harder to implement these expensive procedures. We provide some simple suggestions that may inexpensively and easily aid students to better understand the courses in which they enroll. First, a simple posting on the Internet of all course syllabi will give students the opportunity to preview a class and its requirements prior to enrollment. This procedure will have the added benefit of allowing faculty to "compare and contrast" their own work with that of their colleagues and may even have the added effect of better course construction and more collaboration

A second, and more intense, suggestion is to increase the interaction with students who drop courses. Too often, enrolling and dropping of courses occurs in a vacuum. Students make these important, and at time life's altering, decisions alone and without the consultation of an experienced and knowledgeable individual. In times of budget crisis it is unlikely that colleges will increase counseling staff or hire individuals who will perform this extra function. However, instructors may also ease the burden by contacting students who drop their courses. A phone call or even an email form an instructor asking why the course was dropped may be very beneficial. Similarly, as students add courses after the first day of class, instructors can question the reasons why the student is enrolling and assess on the spot if it is a suitable fit.

Finally, colleges may investigate more overt types of procedures to stem course shopping. A "three strikes" rule where more than three cycles of cyclic shopping raises a red flag or a limit on the number of drops and adds after the first day of class could be

established. Such a system could either eliminate excessive shopping or could single out students who may be in need of advisement.

In summary, it is obviously beneficial for students to enroll in courses that will provide benefits for them and will not create a situation in which dropping and adding is seen as a necessary move. Proactive measures to lessen the need for shopping appears to be warranted for the success of students and for the lessening of staff time in dealing with drops and adds.

Table 1. Test for Differences in GPA and Success Ratio by Shopping Type

Shopping Pattern (n)	GPA	Success Ratio
No Shopping (3,982) Comparison Group	**2.56**	**.72**
Bulk (337)	2.46 ns	.67*
True Cyclic (322)	2.37**	.62***
Mixed Bag (41)	2.13*	.54***

All comparisons against the "no-shopping" group *** p < .001 ** p< .05 * p< .10

Table 2. Proportions of Shopping Types by Select Demographic Descriptor

Demographic Descriptor (n)	Total Sample	Non shoppers	Cyclic Shoppers	Bulk Shoppers	Mixed Bag Shoppers
% Male (1856)	39.3%	40.4%	36.6%	30.3%	46.3%
% Under Age 30 Years (3,276)	72.2%	69.6%	70.9%	71.2%	87.5%
African American (751)	15.9%	16.6%	20.6%	18.2%	11.1%
Asian (666)	14.1%	15%	18.6%	11.1%	22.2%
Caucasian (638)	13.5%	14.4%	14.0%	14.8%	16.7%
Latino (2,377)	50.3%	54.0%	46.8%	56.0%	50.0%

Table 3. Cyclic Shopping Pattern by Type of Course, Fall 2000 through Winter 2001

Course Type	Counts and percentage of courses	Counts and Percentage of instances of adding same type of course	Counts and Percentage of instances of adding different type of course
English	390 (14.5%)	131 (33.6%)	66.4%
Math	405 (15.1%)	148 (36.5%)	63.5%
Remedial	248 (9.2%)	98 (39.52%)	60.48%
Transfer	2006 (74.8%)	1662 (82.90 %)	17.1%
Occupation	707 (26.4%)	322 (45.5%)	55.5%
Total	2682 (100%)	----	---

Table 4 Cyclic Shopping Patterns and Students in Specified Enrollment Area, Fall 2000 through Winter 2001

Specified Course Type	Total Enrollments in course type	# of Cyclic Shopping Patterns (drop/add sequences) in Specified Course Area	Number of students taking a course in each course type	Number of students displaying cyclic shopping pattern (drop/add) in specified Course type
English	7878	390 (4.9%)	3593	347 (9.7%)
Math	5694	405 (7.1%)	2763	342 (12.4%)
Remedial	8832	248 (2.8%)	2910	210 (7.2%)
Transfer	35828	2006 (5.6%)	4517	1276 (28.2%)
Occupation	15015	707 (4.7%)	4008	574 (14.3%)
Total	52859	2682 (5.1%)	4689	1585 (33.8%)

Table 5. Bulk Shopping by Type of Course

Specified Course Type	Number and % of Bulk Shopping Students Dropping Each Type Of Course	Average Number of Course Attempts in the Specified Course Types	Average Number of Drops in the Specified Course Type and % of Attempts
English	68 (28.7%)	2.44	1.34 (54.9%)
Math	67 (28.3%)	2.15	1.22 (56.7%)
Remedial	36 (15.2%)	2.33	0.40 (17.2%)
Transfer	206 (86.9%)	6.57	2.16 (32.9%)
Occupation	120 (50.6)	3.99	1.53 (38.3%)
Total	237	8.80	2.50 (28.4%)

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